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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,965	06/26/2000	Tetsuya Yamada	501.38642X00	1963

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EXAMINER

KIM, KENNETH S

ART UNIT	PAPER NUMBER
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2181

DATE MAILED: 10/31/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603,965

PR4
Applicant(s)

YAMADA ET AL.

Examiner

Kenneth S KIM

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) 11-31, 39-51, 53 and 57-62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10, 32-38, 52 and 54-56 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 1-10, 32-38, 52, and 54-56 have been elected for examination and claims 11-31, 39-51, 53, and 57-62 remain non-elected.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 and 32-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 9, it is not clear whether there is supposed to be a first register in the base claim.

(b) Claim 32, it is not clear from where and to where the instruction is input. It is also not clear what instruction is output for the first decoder.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 10, 32-35, 37, 38, 52, and 54-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Black et al, U.S. Patent No. 5,619,408.

Black et al teaches the invention as claimed in claim 1 including a microprocessor comprising:

- (a) an instruction processor (104),
- (b) an instruction decoder (in 111; col. 3, line 2) to decode output from said instruction processor,
- (c) a processor (114; col. 3, line 4) to make calculations according to the output from said instruction decoder,
- (d) wherein when the instructions that are input are specified instructions (col. 2, line 54), said instruction processor outputs said instructions to said instruction decoder normal processing), and when the input instructions are other than said specified instructions, a first instruction different from said input instruction (col. 3, line 41) output to said instruction decoder, and

further teaches as in claims 2-7 and 10,

- (e) wherein said instruction processor has an instruction discriminator circuit (col. 2, line 50) and an instruction selection circuit (a well known method of replacing one with another) – claim 2,
- (f) wherein said instruction performs a calculation and the processor is a designated floating point unit (col. 1, line 26) – claims 3, 6, and 7,
- (g) wherein the first instruction is an NOP instruction for a designated code (col. 3, line 41) – claims 4 and 5,

(h) wherein the microprocessor is formed on the same semiconductor substrate (well known) – claim 10.

The microprocessor claims 32-35, 37, and 38 with an additional decoder (multiple decoders in 114; col. 1, line 61) and processor (114, units A to N) and the microprocessor claims 52 and 54-56 with a selector circuit selecting based on discrimination of a specified bit of the input instructions (col. 2, line 49) are equivalently rejected based on the same reason.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sipple taught a method of detecting invalid instruction code.

Chao et al taught a method of selecting replacement microinstruction for an invalid microinstruction.

Potter taught a method of detecting unrecognized instructions and replacing with emulation codes.

Jen et al taught a method of using nop instruction execution time by selecting a next instruction to execute.

7. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The claim is allowable for the references of prior art do not teach halting calculation latches when a replacement instruction is input.

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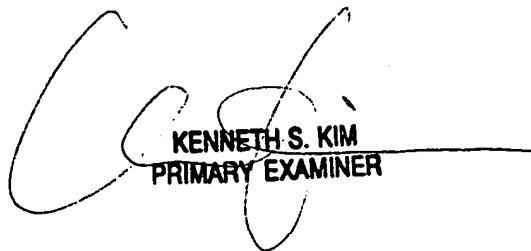
8. Claims 9 and 36 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The claims would be allowable for the references of prior art do not teach an additional set of decoder and processor receiving and processing the same input instruction.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth S KIM whose telephone number is (703) 305-9693. The examiner can normally be reached on M-F (8:30-17:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


KENNETH S. KIM
PRIMARY EXAMINER